

## REMARKS

Claim 1 is amended to be clearer.

The inner layer composition has been revised to be in Markush language to restate the original meaning of this portion of claim 1. It is respectfully submitted the language "PET, modified PET and/or combinations thereof" in the original claim 1 meant the PET and modified PET could be present individually or in combination.

The barrier layer recitation has been amended as follows:

"a layer ~~comprising~~ consisting essentially of at least one mixture of PET and PBT selected from the group consisting of (i) a blend of PET[[,]] and PBT and (ii) a copolymer of PET and PBT ~~and/or combinations thereof~~, as a barrier layer."

It is respectfully submitted this is supported by page 3, lines 12-13 disclosing the barrier layer may be obtained by blending and/or copolymerization.

A PET is any typical grade of polyethylene terephthalate polyester in the art. For example, standard (bottle grade) material PET polyester is encompassed by the term PET. Likewise, a PBT is any typical grade of polybutylene terephthalate polyester in the art. A copolymer of PET and PBT is any typical grade of copolymer polyester consisting essentially of ethylene terephthalate and butylene terephthalate.

Claims 2 and 3 were amended consistent with the amendment to claim 1.

Claims 1 and 7 were combined and claim 7 amended to describe the barrier layer in consisting terms.

Other changes to the claims are discussed below in the section of these Remarks responding to the Section 112 rejections.

### I. Formality Rejections

The attached REPLACEMENT SHEET amends Fig. 1 to switch the numbers 3 and 5 to be consistent with the description of the specification, page 11, lines 15-20.

The combination of claim 1 and the mixture of claim 3 and further clarification that the mixture is a blend or copolymer of PET and PBT overcomes the objection to claim 3 at page 3 of the Office action.

## II. Obviousness-type Double Patenting

Claims 1, 11-13, 15 and 16 are provisionally rejected on the ground of obviousness-type double patenting in view of claims 13, 17, 18, 20, 21, 23 and 25 of copending US application number 10/545800 to Spaans et al.

The combination of claim 1 and the mixture of claim 3 and further clarification that the mixture is a blend or copolymer of PET and PBT Claims 1 and 3 overcomes this rejection.

## III. 35 USC §102

### A. Hasegawa

Claim 1 is rejected as anticipated by US Patent No. 5,384,354 to Hasegawa et al. (hereinafter "Hasegawa").

The combination of claim 1 and the mixture of claim 3 and further clarification that the mixture is a blend or copolymer of PET and PBT overcomes this rejection.

### B. Asai

Claims 1-4, 6-15 and 18-23 are rejected as anticipated by US 5,780,158 to Asai et al. (hereinafter "Asai").

Asai discloses a triple layered metal substrate. The first layer comprises ethylene terephthalate as a main recurring element. The second layer is formed from a combination of polyesters and a polycarbonate. The polyesters are a first polyester comprising ethylene terephthalate and a second polyester comprising butylene terephthalate. However, the second layer also requires polycarbonate, as for example explained at Col. 5, lines 42-44. Col. 9, lines 56-65, discloses the polyester of the first layer is also effective for the third layer.

Col. 2, lines 60-67 discloses the first layer is formed from a polyester comprising at least 50 mol % ethylene terephthalate, and a polyester which contains ethylene terephthalate in an amount of 80 to 100 mol % is advantageously used. Col. 3, lines 1-12 lists a number of dicarboxylic acids and glycols copolymerizable with such a polyester. One of the dicarboxylic acids is isophthalic acid and one of the glycols is 1,4-

cyclohexane dimethanol. The examples of Asai, e.g., see Table 3, list PET-based polyester having glass transition temperatures of 74 and 78 degrees C.

The combination of present claim 1 and the mixture of claim 3 and clarification that the mixture consists essentially of a blend or copolymer of PET and PBT overcomes this rejection. Amended claim 1 does not permit the polycarbonate of the middle layer of Asai. Asai teaches its first and second polyesters and its polycarbonate are separate polymers. See for example, col. 4, lines 26-33, describing the polyesters and col. 5, line 63-col. 6, line 3, describing the polycarbonate. According to Asai the polycarbonate affects the properties of its layer. Asai, Col. 5, lines 42-44, states "If the proportion of the polycarbonate is less than 20% by weight, impact resistance at low temperature will not be improved." Thus, Claim 1 permits conventional additives but excludes the polycarbonate of Asai.

Claim 7 recites "consisting" language to also exclude polycarbonate.

#### IV. 35 USC §103

Claims 5, 16 and 17 are rejected under 35 USC §103 as being unpatentable over Asai as applied to claim 1.

The above-described amendment to avoid the polycarbonate of the middle layer of Asai, by amending claim 1 to have the barrier layer consist of a mixture of PET and PBT, also overcomes to this rejection.

#### V. 35 USC §112

Claims 1, 2, 4-8, 12 and 18-20 are rejected under 35 USC §112, second paragraph as being indefinite.

The Office action asserts the terms "non-tacking properties" and "tacking" in claims 1, 2, 7 and 8 as well as "normal operation temperatures" in claim 1 are relative terms which give no sense of degree. Applicant removed these terms and added to base claim 1 the glass transition temperature of claim 7. Claim 7 was cancelled consistent with this amendment.

The Office action asserts the term "modified PET" in claim 1 is indefinite.

Amended claim 1 recites modified PET as "PET modified with at least one member of the group consisting of iso-phthalic acid or cyclohexane dimethanol" as disclosed by the present application at page 3, first full paragraph.

The Office action objects to the term "sufficiently high" in claim 2. Amended claim 2 no longer recites this term.

The amended claims 4-6 and 18-20 clarify the percentages are in weight percent, consistent with the statement at page 6, lines 25-26, of the present application and they recite the mixture as "the barrier layer mixture".

The Office action objects to the term "about" in claims 4 and 6. Applicant asserts case law has found the term "about" is proper. *Eiselstein v. Frank*, 34 USPQ 1467 (Fed. Cir. 1995)(The case found the disclosure of an alloy of 45 to 55 % Ni supports about 45 to about 55 % Ni). A copy of this case is attached (ATTACHMENT 2).

The Office action objects to the term "approximately" in claim 5. In response, Applicant changed "approximately" to "about" in claim 5.

The Office action objects to the term "substantially" in claim 12. Applicant removed the term "substantially" in Claim 12.

#### VI. Conclusion

In view of the above it is respectfully submitted all objections and rejections are overcome. Thus, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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## ATTACHMENT 1 - REPLACEMENT DRAWING SHEET